

**BUSH CRICKETS AND THE BURREN, WITH FIRST RECORDS OF
PHOLIDOPTERA GRISEOPTERA (DE GEER)
(ORTH.: TETTIGONIIDAE)**

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WHETHER in Ireland on holiday or for other purposes, visiting entomologists almost inevitably manage a few days in the karstic limestone massif of the Burren (Co. Clare). Perhaps they would not consider an encounter with a common and widespread European bush cricket there to be of any note, but, in reality, until now there are no records of any tettigoniid from the Burren.

Ireland's fauna of long-horned grasshoppers and bush crickets is curiously limited. Until the 1970s the only species known from Ireland were two oak woodland species, *Leptophyes punctatissima* (Bosc) and *Meconema thalassinum* (De Geer). Then an isolated colony of *Metrioptera roeselii* (Hagenbach) was discovered, beside a coast road in Waterford, in the south-east of the island (Anderson, 1977). This was followed by the recording of a single population of *Pholidoptera griseoptera*, from thick bramble scrub in the same part of the country (O'Connor and O'Connor, 1985). A clearly introduced, live individual of *Tettigonia viridissima* (L.) was then recorded from a camp-site in Co. Cork (Good and Cullinane, 1990). Finally, *Conocephalus dorsalis* (Latreille) was added, also apparently from a site somewhere in Co. Cork (Haes and Harding, 1997), though precise details of this last record do not seem to have been published anywhere. Apart from the discovery of a second colony of *P. griseoptera*, this time in Co. Cork, there have been no additional sightings of these latter four species in Ireland.

During late spring of 1998 I swept nymphs of *Pholidoptera griseoptera* from a steep, south-west-facing slope of patchily-vegetated limestone pavement dotted with small bushes of *Corylus*, at about 50m altitude on the northern edge of the Burren. Subsequent visits established that the colony extended over a piece of ground no more than c.250 metres long by 30 metres wide. The insects were absurdly easy to find and capture, at all stages of their development – the propensity of this species to dive into impenetrable cover, like bramble, is redundant in this type of vegetation, because there is nowhere to hide.

Having visited many parts of the Burren previously, I was disconcerted to encounter *P. griseoptera* there for the first time in 1998, particularly since relocating it at that locality subsequently proved to be so easy – on no occasion was I unable to find it again, whether I visited the site in the morning, mid-day or evening, in sunshine or overcast conditions. Indeed, this particular site I am quite familiar with, having visited it on a number of occasions in the past because of its general syrphid interest – its syrphid fauna includes *Cheilosia ahenea* (von Roser), *Microdon mutabilis* (L.) and *Paragus constrictus* Simic, present there in good numbers. If one were to set out to look for *P. griseoptera* in the Burren, I doubt one would start by investigating this particular locality, because it is, despite its low altitude, rather cool – a significant proportion of the ground cover is *Dryas* mats and *Calluna*, and the

Dryas continues to flower there long after it has finished seeding over much of the Burren. Putting these various thoughts together with the reality that the site is within 100m of a road left me inclined to believe that someone had introduced *P. griseoptera* there. This opinion was reinforced when I later had opportunity to search a range of locations scattered round the Burren in mid-July, looking specifically for *Pholidoptera*. During this entirely fruitless search I tried to visit as many localities as possible with a similar mix of vegetation and bare pavement, at more-or-less the same altitude as the *P. griseoptera* colony.

There are thousands of hectares of patchy *Corylus* scrub intermixed with bare limestone pavement on the Burren, so comprehensive search of the massif for *P. griseoptera* colonies is logistically out of the question. Nonetheless, it would seem possible, working from first principles, to identify the sorts of site in which its occurrence might be most likely. Similarly, given the fact that the predominant vegetation cover of the Burren is largely uninterrupted over vast surfaces and has supposedly been in place for hundreds, if not thousands, of years, it would seem reasonable to conclude that *Pholidoptera*, if found at one location in the Burren, would quickly prove to be widely distributed there. In other words, if any present-day landscape were to be "permeable" to the species inhabiting it, the Burren would be.

Towards the end of August I had an unexpected, additional visit to the Burren, for the purpose of showing sites of interest to some visiting French and Swiss scientists. One member of the party hurt his ankle, forcing a shorter, more direct return to the cars than had been intended, over ground not previously visited. We were suddenly in the midst of a vast colony of *P. griseoptera*, which proved to stretch for more than a kilometre over more-or-less flat, south-east facing terrain, at a significantly higher altitude (c. 200m) than the other *P. griseoptera* colony.

The two locations now known for *P. griseoptera* in the Burren are not far from one another, being separated by no more than 3km. The second, larger colony, is nearly 1km from any existing road. If these colonies result from introduction by man, this presumably happened long ago, considering the large size of the second colony.

Having tried, unsuccessfully, to find *Pholidoptera* at various locations in the Burren, I was inclined to the view that the species is not widely distributed there. But its discovery at a second site suggests it could occur in discrete, widely separated colonies at up to 200m. Whether or not that proves to be the case, there are other implications to *Pholidoptera* remaining undetected in the Burren until now. *P. griseoptera* is a large insect and, at least in the Burren, it is not difficult to detect when present. The Orthoptera are not much studied in Ireland – there are insufficient species to make specialising in Orthoptera a particularly rewarding pastime. Localised populations of other unrecorded orthopteran species could thus likewise remain so far undetected. But visiting entomologists could easily dismiss such populations as unworthy of note, being unaware of the limited number of species recorded in Ireland and the low numbers of records of those that are known. It is my hope that this salutary tale might encourage such visitors to keep an eye open for Orthoptera during their peregrinations in Ireland and to ensure that records they

accumulate see the light of day somewhere. Certainly, I would be glad to help with the identification of any apparently anomalous specimens.

Data for the Burren *P. griseoptera* records are as follows (Irish grid references are followed, in brackets, by 50km, UTM grid references):

Pholidoptera griseoptera (De Geer), 1773

Clare: 19 August 1998, M3204 (MU3), males and females, limestone pavement with patches of ground vegetation and clumps of low *Corylus*, 200m, coll. and det. M.C.D. Speight, male presented to collections of National Museum of Ireland.

Galway: 22 May 1998, nymphs, 22 July 1998 last instar nymphs, M3405 (NU1), limestone pavement with patches of ground vegetation and clumps of low *Corylus*, 50m., coll. and det. M.C.D. Speight, reared female and nymph presented to collections of National Museum of Ireland.

References

- Anderson, R., 1977. *Metrioptera roeselii* (Hagenbach) (Orthoptera: Tettigoniidae) new to Ireland. *Irish naturalists Journal* **19**: 17.
- Good, J.A. & Cullinane, D., 1990. The great green bush cricket, *Tettigonia viridissima*, L. (Orthoptera: Tettigoniidae) imported in a tent. *Irish Naturalists Journal* **23**: 220.
- Haes, E.C.M. & Harding, P.T., 1997. *Atlas of grasshoppers, crickets and allied insects in Britain and Ireland*. The Stationary Office, London.
- O'Connor, J. P. & O'Connor, M.A., 1985. *Pholidoptera griseoptera* (De Geer) (Orthoptera: Tettigoniidae) new to Ireland. *Entomologist's Gaz.* **36**: 229-232.

Further records of two species of *Oedemera* Olivier (Col.: Oedemeridae) in Kent

The note by Mr A.A. Allen on *Oedemera nobilis* (Scop.) (*Ent. Rec.* **110**: 293) in which he referred to its apparently local distribution within the county was of considerable interest. Being such a "striking and handsome beetle" and one that can instantly be identified in the field my initial recollection was that the species was common and widespread. A perusal of my records, however, revealed only 19 sightings of the beetle between 1979 and 1998 and from 1986 to 1994 there were none whatsoever. The data are: 9.viii.1979 Murston, near Sittingbourne O.S. grid reference TQ 924655 dry fly-ash tip; 12.vi.1983 Murston, near Sittingbourne TQ 921649 derelict industrial grassland and scrub; 7.viii.1983 St. Margaret's at Cliffe, TR 3847 chalk cliff-top grassland; 27.vi.1984 Darland Banks, Gillingham, TQ 793655 open chalk downland; 14.viii.1984 Beltinge Cliff, TR 192685 on flowers of *Daucus carota* L. on coastal clay slopes; 24.viii.1984 Deerton Street, near Teynham, TQ 965628 on flowers of *Daucus carota* L. along roadside verge; 1.viii.1985 Murston, near Sittingbourne TQ 926653; 10.viii.1985 Ham Fen, TR 336550 on flowers of hogweed *Heracleum sphondylium* L.; 28.viii.1985 Upper Luton, Gillingham, TQ 7766 open chalk downland; 10.vii.1994 Burham Down, TQ 7462